



# **Egyptian Herbal Monograph**

**Volume 3**

**Medicinal Plants used in Egypt**

**Egyptian Drug Authority (EDA)**

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# Egyptian Herbal Monograph

## Medicinal Plants Used in Egypt

***Psidium guajava* L.**

جوافة

### 1. Names & Synonyms (1)

*Psidium guajava* L.

Family: Myrtaceae.

Syns.: *Psidium aromaticum*, *P. cujavillus* Burm, *P. pomiferum*, *P. pyriferum*, *P. pumilum*.

Arabic: Gawafa جوافة

English name: Guava.

### 2. Parts used for medicinal purpose

Dried leaves (1).

### 3. Major chemical constituents

#### Phenolic Compounds (2)

- Flavonoids: Quercetin and its glycosides, avicularin, apigenin, guaijaverin, kaempferol, kaempferol-3-arabofuranoside, hyperin, myricetin, rutin, catechin, epicatechin, epigallocatechin gallate and proanthocyanidins.
- Phenolic acids: Gallic acid and caffeic acid.

#### Essential Oil (3,4)

- $\beta$ -Caryophyllene,  $4\alpha$ -selin-7 (11)-enol,  $\beta$ -caryophyllene oxide,  $\alpha$ -selinene,  $\beta$ -selinene,  $\delta$ -cadinene, daucol, cubenol, 1,8-cineole (eucalyptol) and aromadendrene.

#### Others (2)

- Sugars: Sulphated and unsulphated polysaccharides (uronic acid), minerals (calcium, potassium, sulfur, sodium, iron, boron, magnesium, manganese and zinc), vitamins (C and B) and macronutrients (protein and fat).



#### 4. Medicinal Uses (Indications)

- A. Cough sedative (1-3, 5, 6).
- B. Antidiarrheal agent (1, 2, 7-9).
- C. For gingivitis and bleeding gum (1).

It is also reported to be used in certain gastrointestinal disorders as antispasmodic (2, 7-9) and in viral and infectious gastroenteritis (1, 10).

#### 5. Herbal preparations correlated to medicinal use

- 1. Decoction (1,10).
- 2. Powdered drug (1).
- 3. Aqueous liquid extract (1).
- 4. Dry extract (10).

Herbal preparations (3 and 4) are in liquid and solid dosage forms, respectively. The pharmaceutical form should be described by the pharmacopoeia full standard term.

#### 6. Posology and method of administration correlated to medicinal use

##### Preparation 1

**Indication A:** The appropriate oral dose depends on several factors such as the user's age, health and other several conditions.

**Indication B:** Three times daily (10).

##### Preparation 2

**Indication B:** 500 mg of the powdered leaves to be taken orally 3-4 times daily (1).

##### Preparation 3

**Indication A:** The appropriate oral dose depends on several factors such as the user's age, health and other several conditions.

**Indication C:** 15 ml to be used externally as mouthwash 3 times daily for at least one minute per session (1).

##### Preparation 4

**Indication B:** 500 mg oral capsule containing powder dry extract every 8 hours for 3 days (10).

**Method of administration:** Oral and external use.



## 7. Contraindications

Hypersensitivity to the active substances and to other plants of the same family.

## 8. Special warnings and precautions for use

If the symptoms worsen during the use of the medicinal product, a doctor or a pharmacist should be consulted.

## 9. Interactions with other medicinal products and other forms of interaction

None reported.

## 10. Fertility, pregnancy and lactation

- Safety during pregnancy and lactation has not been established. In the absence of sufficient data, the use during pregnancy and lactation is not recommended.
- No fertility data available.

## 11. Effects on ability to drive and use machines

No studies on the effect on the ability to drive and use machines have been performed.

## 12. Undesirable effects

- None reported.
- If adverse reactions occur, a doctor or a pharmacist should be consulted.

## 13. Overdose

No case of overdose has been reported.

## 14. Relevant biological activities

Not required as per Egyptian guidelines for registration of herbal medicines.

## 15. Additional Information

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## 16. Date of compilation/last revision

24/05/2022.

## References

1	WHO monographs on selected medicinal plants (2007). Monographs on selected medicinal plants, <b>4</b> , 127-139.
2	Kumar, M., Tomar, M., Amarowicz, R., Saurabh, V., Nair, M. S., Maheshwari, C., Sasi, M., Prajapati, U., Hasan, M., Singh, S., Changan, S., Prajapat, R. K, Berwal, M. K. and Satankar, V. (2021). Guava ( <i>Psidium guajava</i> L.) leaves: Nutritional composition, phytochemical profile, and health-promoting bioactivities. <i>Foods</i> , <b>10</b> , 752.
3	Karawya, M. S., Abdel Wahab, S. M., Hifnawy M. S., Azzam S. M. and EL- Gohary H. M. (1999). Essential oil of Egyptian Guajava leaves. <i>Egypt. J. Pharm. Sci.</i> , <b>40</b> (2), 209-217.
4	El-Ahmady, S. H, Ashour, M. L. and Wink, M. (2013). Chemical composition and anti-inflammatory activity of the essential oils of <i>Psidium guajava</i> fruits and leaves. <i>The Journal of Essential Oil Research</i> , <b>25</b> (6), 475-481. <a href="http://dx.doi.org/10.1080/10412905.2013.796498">http://dx.doi.org/10.1080/10412905.2013.796498</a> .
5	Abou Zid, S. F. and Mohamed, A. A. (2011). Survey on medicinal plants and spices used in Beni-Sueif, Upper Egypt. <i>Journal of Ethnobiology and Ethnomedicine</i> , 7-18.
6	Jaiarj, P., Khoohaswan, P., Wongkrajang, Y., Peungvicha, P., Suriyawong, P., Saraya, M. L. and Ruangsomboon, O. (1999). Anticough and antimicrobial activities of <i>Psidium guajava</i> Linn. leaf extract. <i>Journal of Ethnopharmacology</i> , <b>67</b> , 203-212.
7	Metwally, A. M., Omar, A. A., Ghazy, N. M., Harraz, F. M. and El Sohafy, S. M. (2011). Monograph of <i>Psidium guajava</i> L. leaves. <i>Pharmacognosy Journal</i> , <b>3</b> (21), 89-104.
8	Mazumdar, S., Akter, R. and Talukder, D. (2015). Antidiabetic and antidiarrhoeal effects on ethanolic extract of <i>Psidium guajava</i> (L.) Bat. leaves in Wister rats. <i>Asian Pac. J. Trop. Biomed.</i> , <b>5</b> , 10-14.
9	Ojewole, J. A. O., Awe, E. O. and Chiwororo, W. D. H. (2008). Antidiarrhoeal activity of <i>Psidium guajava</i> Linn. (Myrtaceae) leaf aqueous extract in rodents. <i>J. Smooth Muscle Res.</i> , <b>44</b> , 195-207.
10	<a href="https://www.drugs.com/npp/guava.html">https://www.drugs.com/npp/guava.html</a> .